REMARKS

Claims 1 and 3-14 are pending in the application. Claim 1 has been amended by the present amendment to incorporate the subject matter of claim 2, which is cancelled without prejudice. The amendment is fully supported by the specification as originally filed.

The title was objected to as not being descriptive. A new title is provided which is clearly indicative of the invention to which the claims are directed. Withdrawal of the objection is respectfully requested.

Applicant's claimed invention is directed to a wafer test method including steps of: providing a wafer integrally formed of a plurality of chips, including a plurality of bond pads formed on an active surface of each chip; preparing a conductive interposer composed of a plurality of interposer units each corresponding to one of the chips, each of the interposer units having a first surface and an opposite second surface, where the first surface is formed with a plurality of test pads, and the second surface is formed with a plurality of test bumps electrically connected to the test pads, the test bumps corresponding to the bond pads of the chips, where the conductive interposer is mounted on the wafer such that the test bumps are in electrical contact with the bond pads of the chips; and using test probes to contact the test pads to perform tests on the chips.

Applicant's claimed invention can yield significant benefits. Because a conductive interposer is provide for each corresponding chip, and test pads are formed in each interposer unit, each chip can be tested easily for quality and functionality (see, e.g., specification at page 6, fourth paragraph). In the Applicant's claimed invention, test pads are formed substantially over the entire interposer.

Claims 1-14 were rejected under 35 USC 102(b) as being anticipated by U.S. Patent 5,559,446 to Sano. This rejection is respectfully traversed.

Sano does not teach or suggest a wafer test method in which a plurality of interposer units correspond to a plurality of chips, respectively, and where each interposer unit includes a plurality of test pads electrically connected to bond pads of a chip.

In Sano, a circular probe card 2 (cited as corresponding to the "conductive interposer" in the Office Action) is formed with a plurality of connecting through holes 22 "at the outer circumferential portion" of the probe card 2 (see Sano at column 4, lines 25-30). On page 3, line 2 of the Office Action, upper ends of these through holes 22 were referred to as test "pads", where the through holes 22 are contacted by pogo pins 51 (see column 4, line 63 to column 5, line 1; FIG. 2).

Since these through holes 22 are arranged only at outer circumferential portions of the probe card 2, the number of test pads is limited, and there is no teaching or suggestion of separate interposer units each corresponding to one of the chips, where each interposer unit includes a plurality of test pads.

In contrast, in the Applicant's invention, a plurality of test pads 33 are arranged on a first surface of each conductive interposer unit 30, thereby providing multiple points for probing corresponding bond pads 13 of a chip 10 (see FIG. 1B of application). Therefore, the Applicant's claimed invention teaches separate interposer units, each corresponding to a chip, where each interposer unit includes a plurality of test pads.

It would not be obvious to provide separate interposer units with multiple test pads in Sano, because Sano is directed to a probing method in which contacts of the probe card are kept in contact with electrode pads of a wafer during electrical testing while the wafer is heated or cooled (see, e.g., column 2, lines 39-45). According to Sano, the portion of the probe card in contact with the wafer must be thermally expanded or shrunk along with the wafer, and thus this portion cannot be formed with test pads to be contacted by test probes.

For at least the reasons discussed above, Sano does not anticipate or otherwise render obvious the Applicant's claimed invention.

It is believed the application is in condition for immediate allowance, which action is earnestly solicited.

Respectfully submitted,

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